



UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

JOANNE HART and SANDRA )  
BUENO, on behalf of )  
themselves and all others )  
similarly situated, )  
Plaintiffs, )  
vs. ) No.1:15-CV-04804-WHP  
BHH, LLC d/b/a BELL + )  
HOWELL and VAN HAUSER, LLC, )  
Defendants. )

Videotaped Deposition of DR. PAUL W.  
BORTH, called for examination, taken pursuant  
to the Rules of the United States District Courts,  
pertaining to the taking of depositions, taken before  
Lynn A. McCauley, CSR No. 84-003268, RPR, a Certified  
Shorthand Reporter of the State of Illinois, at  
33 West Monroe Street, Suite 1100, Chicago, Illinois,  
on January 16, 2018, at 9:44 a.m.

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1	any matters contained within those reports? 09:48
2	A. No, they serve to reinforce it. 09:48
3	Q. What was your assignment in this case? 09:48
4	A. It would be best if I could read the 09:48
5	purpose -- 09:48
6	Q. Go ahead. 09:48
7	A. -- of the reason I was retained. 09:48
8	So this is included in my 09:48
9	Defendants' Expert Disclosure. 09:48
10	"This document was prepared to 09:48
11	evaluate the research reports that BHH, LLC and 09:48
12	Van Hauser, LLC used to support the entomological 09:48
13	claims made on and in the packaging and owner's 09:48
14	manual of various of its ultrasonic pest repeller 09:48
15	products." 09:49
16	That's the basis, the primary 09:49
17	purpose. 09:49
18	Q. Okay. Are you providing an opinion as to 09:49
19	the efficacy of the Bell + Howell ultrasonic pest 09:49
20	repellers in driving out and repelling insects? 09:49
21	A. Yes. 09:49
22	Q. Are -- and can we agree for today -- I 09:49
23	understand that this isn't completely scientifically 09:49
24	accurate -- but can we agree for today that if I say 09:49
25	the word insects, I am referring to ants, spiders, 09:49

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1	course of several years to write product labels, to 09:53
2	review product labels, and to approve product labels. 09:53
3	Sometimes the essence of those were 09:53
4	written up in trade magazine articles and then 09:53
5	published in a trade magazine, which would -- the 09:53
6	circulation of that trade magazine would be going to 09:53
7	the customers of Dow AgroSciences, so I would 09:53
8	consider that marketing. 09:53
9	Q. Who were the customers you're referring 09:53
10	to? 09:53
11	A. Professionals generally, 09:53
12	agriculturalists, urban pest management 09:53
13	professionals, owners of distributorships. 09:53
14	Q. Okay. Did -- does Dow distribute 09:53
15	products directly to nonprofessional consumers? 09:53
16	MR. OSTOJIC: Object to form. 09:54
17	But go ahead. 09:54
18	BY THE WITNESS: 09:54
19	A. I cannot recall any that they did during 09:54
20	my employment. 09:54
21	BY MR. KOPEL: 09:54
22	Q. Have you ever worked on any matter 09:54
23	pertaining to the marketing of a product that was 09:54
24	distributed directly to nonprofessional consumers? 09:54
25	A. I have to -- I have to clarify your -- 09:54

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1	So, again, there's a layer in 09:56
2	between Dow and the enduser. 09:56
3	Q. So did -- did Dow have any role in 09:56
4	creating the packaging or labeling of a product that 09:56
5	was ultimately viewed by a nonprofessional consumer? 09:56
6	MR. OSTOJIC: Object to form. 09:56
7	BY THE WITNESS: 09:56
8	A. Yes. 09:56
9	BY MR. KOPEL: 09:56
10	Q. And were you involved in that? 09:56
11	A. Yes. 09:56
12	Q. Can you give me an example? 09:56
13	A. An example would be chlorpyrifos is the 09:56
14	active ingredient, c-h-l-o-r-p-y-r-i-f-o-s, that's 09:56
15	the active ingredient sold under the trade name at 09:56
16	one time of Dursban, D-u-r-s-b-a-n. Dursban was sold 09:56
17	in big box stores like Lowe's Home and Garden, many, 09:56
18	many other places. 09:57
19	Now, Dow would have provided the 09:57
20	basic product information on the label and any claims 09:57
21	that were made on the product. 09:57
22	Whether the distributor or that next 09:57
23	layer added things was beyond the scope of Dow. 09:57
24	Q. Okay. So do you know for certain whether 09:57
25	or not any claims that appeared on a packaging 09:57

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1	marketed to nonprofessionals were ever written or 09:57
2	reviewed by you personally? 09:57
3	A. I could not give you an example. 09:57
4	Q. So when it comes to claims written on the 09:57
5	labeling of Bell + Howell ultrasonic pest repellers, 09:57
6	would you consider yourself an expert in 09:57
7	interpretation of those claims? 09:58
8	A. I would. 09:58
9	Q. What's your basis for -- 09:58
10	A. The basis -- sorry. 09:58
11	Q. What's your basis for that? 09:58
12	A. The basis is that I spent many years 09:58
13	writing, reviewing, approving pesticide labels to the 09:58
14	consumer -- or the customer of Dow AgroSciences. 09:58
15	I am very well aware of the 09:58
16	technical language that appears on labels. I've 09:58
17	written it, I've reviewed it, I've approved them, and 09:58
18	since the information on a product label is -- in my 09:58
19	opinion -- a binding document so to speak, it tells 09:58
20	the enduser how to use the product. 09:58
21	How I wrote those labels for Dow 09:58
22	products would also apply for products that were 09:58
23	distributed or sold by Bell + Howell or Van Hauser. 09:58
24	Q. Okay. And you hold that opinion even 09:59
25	though you've -- you can't give me a single example 09:59

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1	opinion is legal or not. 10:02
2	Q. Okay. 10:02
3	A. You'd have to educate me. 10:02
4	Q. Sure. 10:02
5	And we just discussed an example. 10:02
6	Whether or not a consumer is required to read 10:02
7	instructions and use a product as directed. 10:02
8	Would you agree that that's 10:02
9	something that would be at least potentially governed 10:02
10	by the applicable law? 10:02
11	MR. OSTOJIC: Object to form, foundation. 10:02
12	BY THE WITNESS: 10:02
13	A. I think -- yes, I would think so. 10:02
14	BY MR. KOPEL: 10:02
15	Q. And you're not -- you're not qualified to 10:02
16	render an opinion on that; correct? 10:02
17	A. I cannot point to a legal statute that 10:02
18	would say so. It makes common sense to me but... 10:02
19	Q. Do these reports, Exhibits 1 and 2 in 10:02
20	front of you, do they list all facts or data that you 10:02
21	considered in forming your opinions? 10:03
22	A. At the time that I wrote them, yes. 10:03
23	Q. Now, I -- I think that your report 10:03
24	referenced six tests that were conducted on the 10:03
25	Bell + Howell ultrasonic pest repeller; correct? 10:03

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1	BY MR. KOPEL: 10:33
2	Q. If pests in a crack in a floor or 10:33
3	underneath a floor, then the ultrasonic sound waves 10:33
4	would not be able to reach them; correct? 10:33
5	A. More than likely. 10:33
6	Q. Okay. So is -- so is that area included 10:33
7	under your definition of drives pests out? 10:33
8	MR. OSTOJIC: Object to form. 10:33
9	But go ahead. 10:33
10	BY THE WITNESS: 10:33
11	A. If it was to drive -- if the ultrasonic 10:33
12	repeller drove pests out of a room, let's say, to 10:33
13	some area where they could not hear or be exposed to 10:33
14	the ultrasonic sound, then the answer is yes; and if 10:33
15	that's behind walls, yes; if that's in cracks, yes; 10:33
16	if it's -- if they can't -- if they're not exposed to 10:33
17	the sound, they can't be repelled. 10:33
18	BY MR. KOPEL: 10:34
19	Q. Do you think it was -- it is unreasonable 10:34
20	for a consumer to understand drives pests out to mean 10:34
21	drives pests out of the house? 10:34
22	A. I do not. 10:34
23	Q. You think that is a reasonable 10:34
24	interpretation? 10:34
25	A. I sure do. 10:34

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1	that these devices do not repel pests." 11:35
2	Do you see that? 11:35
3	A. Yes. 11:35
4	Q. Okay. And 4 to 8 are Chinese testing of 11:35
5	the Bell + Howell ultrasonic devices; correct? 11:35
6	MR. OSTOJIC: Object to form. 11:35
7	BY THE WITNESS: 11:35
8	A. Yes. 11:35
9	BY MR. KOPEL: 11:35
10	Q. And those -- those tests are contained 11:35
11	within Exhibits Borth 3, 4, 5, and the document which 11:36
12	I handed to you, which was previously marked as 11:36
13	Exhibit 13; correct? 11:36
14	A. Yes. 11:36
15	Q. Okay. And Reference 13 is referring to a 11:36
16	1984 study performed by Ballard, Gold and T. Decker; 11:36
17	correct? 11:36
18	A. Correct. 11:36
19	Q. And these are -- and one last thing. 11:36
20	Reference 10 is a chi-square test analysis that you 11:36
21	performed on References 4 through 8; correct? 11:36
22	A. Correct. 11:36
23	Q. And these -- these seven sources are what 11:36
24	you are basing your opinion on that these devices do 11:37
25	repel pests; correct? 11:37

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1	A. In part, yes. 11:37
2	Q. What do you mean by in part? 11:37
3	A. Well, I base my opinion on everything, 11:37
4	totality of everything I looked at, which would 11:37
5	include everything on this list. 11:37
6	Q. Okay. What else on this list supports 11:37
7	that finding? 11:37
8	A. Everything. Referenced -- in total, 11:37
9	References 1 through 23. Everything I read goes into 11:37
10	making an opinion. 11:37
11	Q. I understand, but, you know, taken by 11:37
12	itself, did you find evidence in the First Amended 11:37
13	Class Action Complaint that these devices are 11:37
14	effective to repel pests? 11:37
15	A. First Amended Class Action -- okay. I 11:37
16	have to ask to be repeated again. Sorry. 11:37
17	Q. Sure. 11:38
18	Taken by itself, did you find any 11:38
19	evidence within the First Amended Class Action 11:38
20	Complaint that the Bell + Howell devices are 11:38
21	effective to repel pests? 11:38
22	A. I don't know -- I'm sorry. But I don't 11:38
23	know how you connect the Complaint. Maybe it's 11:38
24	semantics, but I'm not understanding. 11:38
25	Q. Well, the only reason I'm bringing up the 11:38

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1	people talk about replications.	12:40
2	Q. Given that you don't know the species of	12:40
3	tests used, would you be able to replicate this test	12:40
4	if you wanted to?	12:41
5	MR. OSTOJIC: Object to form, foundation.	12:41
6	But go ahead.	12:41
7	BY THE WITNESS:	12:41
8	A. It would be -- it would be coincidence I	12:41
9	guess. It would be -- I certainly can test roaches,	12:41
10	I can test ants, and I can test spiders.	12:41
11	Whether they're exactly the same	12:41
12	species, we don't know since they -- since they	12:41
13	didn't say.	12:41
14	BY MR. KOPEL:	12:41
15	Q. Well, in common practice and when we talk	12:41
16	about the scientific concept of replication, would be	12:41
17	to use the same species; correct?	12:41
18	A. You would want to have anything	12:41
19	identical, yes, replicates should be identical.	12:41
20	Q. Given that we don't know the model of	12:41
21	pest repeller used here, would that also prevent you	12:41
22	from replicating this test if you wanted to do so?	12:41
23	A. It depended on what level.	12:41
24	If you -- if you wanted to test a	12:41
25	Bell + Howell ultrasonic repeller, and your question	12:41

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1	BY THE WITNESS:	01:58
2	A. They may if they went to university and	01:58
3	had statistic class.	01:58
4	BY MR. KOPEL:	01:58
5	Q. Given that there were uncertainties of	01:58
6	large numbers of new pests added in the middle of the	01:58
7	test and you don't know what chamber they're added	01:58
8	to, are you really comfortable relying on this test?	01:58
9	A. Yes.	01:58
10	MR. OSTOJIC: Asked and answered.	01:58
11	But go ahead.	01:58
12	BY THE WITNESS:	01:58
13	A. Yes again.	01:58
14	BY MR. KOPEL:	01:58
15	Q. Do you think that this would pass muster	01:58
16	in peer review?	01:58
17	MR. OSTOJIC: Object to form.	01:58
18	But go ahead.	01:58
19	BY THE WITNESS:	01:58
20	A. It depends on the peers, it depends on	01:58
21	the publication.	01:58
22	BY MR. KOPEL:	01:58
23	Q. Would you have relied on a test like this	01:58
24	in the course of your work at Dow?	01:58
25	A. No.	01:58

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1	Q. Why not? 01:58
2	A. Too many unanswered questions. 01:58
3	Q. So why are you more comfortable in the 01:58
4	course of your work here relying on it? 01:58
5	A. Because the -- I -- because I've worked 01:59
6	with Dow Chemical, I know the rigor with which they 01:59
7	require their data to be obtained and used and 01:59
8	analyzed. 01:59
9	I don't know the rigor from 01:59
10	Bell + Howell case -- or the Bell + Howell culture. 01:59
11	Q. Was there a reason -- 01:59
12	A. They're different companies. 01:59
13	Q. Was there a reason that Dow Chemical had 01:59
14	a heightened -- a very rigorous standard? 01:59
15	MR. OSTOJIC: Object to form. 01:59
16	Go ahead. 01:59
17	BY THE WITNESS: 01:59
18	A. Well, I didn't set the standard. I only 01:59
19	complied with it. They wanted to reduce variability 01:59
20	and be able to write labels and literature that was 01:59
21	unquestionable. 01:59
22	BY MR. KOPEL: 01:59
23	Q. Do you agree that had the -- these new 01:59
24	pests been added to Chamber B, that would skew the 02:00
25	test results? 02:00

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1 Q. And it's possible they're in the chamber 02:34  
 2 together at the same time that they were -- the -- 02:34  
 3 the spiders, roaches, and ants were affecting each 02:34  
 4 other's movements within the chambers; correct? 02:34  
 5 MR. OSTOJIC: Object to form, foundation. 02:34  
 6 BY THE WITNESS: 02:34  
 7 A. It's possible, yes. We have no way of 02:34  
 8 knowing. 02:34  
 9 BY MR. KOPEL: 02:34  
 10 Q. Well, spiders eat roaches; right? 02:34  
 11 A. Yes. 02:34  
 12 Q. So wouldn't you say it's pretty likely in 02:34  
 13 that case that the spiders were affecting the 02:34  
 14 movement of the roaches? 02:34  
 15 A. No, I didn't say that -- 02:34  
 16 MR. OSTOJIC: Objection to form and 02:34  
 17 foundation. 02:34  
 18 BY THE WITNESS: 02:34  
 19 A. -- I said it's possible. 02:34  
 20  
 21 BY MR. KOPEL: 02:34  
 22 Q. But you don't know one way or the other; 02:34  
 23 right? 02:34  
 24 A. I can't prove it one way or the other. 02:34  
 25 Q. Do you know one way or the other? 02:34

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1	not clear.	02:52
2	Earlier we discussed, you know, that	02:52
3	Dow had rigorous standards when evaluating efficacy	02:52
4	of insecticides, that companies differ in terms of	02:52
5	the standards required.	02:52
6	Do you recall that?	02:53
7	A. Yes, words to that effect. I don't know	02:53
8	that I used the word standards, but, yes, I recall	02:53
9	the conversation.	02:53
10	Q. Okay. In the course of your work at Dow,	02:53
11	would you have relied upon the five -- solely upon	02:53
12	the five studies we just examined, that is the five	02:53
13	Chinese studies of the Bell + Howell repellents in	02:53
14	determining that a product was effective?	02:53
15	You know what. Let me restate the	02:53
16	question, okay?	02:53
17	In the course of your work at Dow,	02:53
18	would you have relied on the five Chinese studies	02:53
19	that we just discussed in making a determination that	02:53
20	the product would be effective inside people's	02:53
21	residences?	02:53
22	MR. OSTOJIC: Object to form, foundation.	02:53
23	To the extent you can answer, go	02:54
24	ahead.	02:54
25		

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1	BY THE WITNESS:	02:54
2	A. I would not have relied on those studies	02:54
3	solely to fulfill my obligation to Dow.	02:54
4	BY MR. KOPEL:	02:54
5	Q. Why not?	02:54
6	A. Because they are -- well, for the reasons	02:54
7	we pointed out. They weren't -- they could have been	02:54
8	done better. They could have been -- or else you	02:54
9	have to have other tests that are done, replicated,	02:54
10	there's a control, the species.	02:54
11	I mean for Dow's purposes, this -- I	02:54
12	would not use these data to make a commercialization	02:54
13	decision on, but I wouldn't discount them either.	02:54
14	I've said that, and I want to make	02:55
15	sure you understand that. I don't throw data out.	02:55
16	So sole -- the -- solely, no. In	02:55
17	combination with other things, as many other things	02:55
18	that I can find, they're part of the package.	02:55
19	Q. Would the totality of the data you've	02:55
20	seen on the effectiveness of the Bell + Howell	02:55
21	repellers, would the totality of that data have been	02:55
22	sufficient for you to commercialize this product for	02:55
23	use in residences with Dow?	02:55
24	MR. OSTOJIC: Object to form, foundation, and	02:55
25	irrelevant.	02:55

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1	But go ahead. 02:55
2	BY THE WITNESS: 02:55
3	A. Well, it's difficult to say because 02:55
4	different -- as I said before, business people are 02:55
5	involved in the decisionmaking at Dow. 02:55
6	If the business leaders saw the data 02:55
7	and agreed that it was sufficient to back up the 02:56
8	claims on the labels, they might have. 02:56
9	Q. Was it -- and, as I understood it, it was 02:56
10	your job to make -- to make these determinations; was 02:56
11	it not? 02:56
12	A. That was one of many. 02:56
13	Q. Okay. 02:56
14	A. But my -- my opinion carried a lot of 02:56
15	weight. 02:56
16	Q. Okay. As to your own purposes, would you 02:56
17	have relied on the totality of the data you've seen 02:56
18	on Bell + Howell repellents to go forward with the 02:56
19	commercialization of the product at Dow? 02:56
20	MR. OSTOJIC: Object. Same objections as 02:56
21	before. 02:56
22	THE WITNESS: As a Dow -- all right. I have 02:56
23	to ask you to read it back because I think you said 02:56
24	at the end as a Dow employee, so that's -- 02:56
25	MR. KOPEL: I believe that's what I -- 02:56

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1	THE WITNESS: -- different. Not a	02:56
2	Bell + Howell employee, a Dow employee.	02:56
3	MR. KOPEL: I believe that's what I said, but	02:56
4	let's --	02:56
5	THE WITNESS: Okay.	
6	MR. KOPEL: Let's let the court reporter read	02:56
7	it back, please.	02:56
8	(WHEREUPON, the record was	02:57
9	read by the reporter.)	02:57
10	MR. OSTOJIC: Same objections.	02:57
11	BY THE WITNESS:	02:57
12	A. All right. For my own purposes, what do	02:57
13	you mean by that?	02:57
14	BY MR. KOPEL:	02:57
15	Q. Sure. I mean in the course of your	02:57
16	professional obligations at Dow.	02:57
17	A. Okay.	02:57
18	No.	02:57
19	Q. Can you please turn to your initial	02:57
20	report at Page 8?	02:57
21	A. Okay.	02:57
22	Q. I'm looking at Opinion 5 and the first	02:58
23	sentence.	02:58
24	A. Oh, sorry. I'm on the wrong one again.	02:58
25	I pulled the rebuttal.	02:58

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1	BY MR. KOPEL:	06:49
2	Q. Have you seen any evidence that the	06:49
3	ultrasonic waves emitted by the Bell + Howell	06:49
4	repellers are capable of reaching pest in a room that	06:49
5	contains furniture?	06:49
6	MR. OSTOJIC: Objection. Asked and answered	06:49
7	and may call -- and foundation.	06:49
8	Also incomplete hypothetical to type	06:49
9	of furniture, where it's located.	06:49
10	Go ahead.	06:49
11	MR. KOPEL: That's called witness coaching.	06:49
12	Please stop that.	06:50
13	BY THE WITNESS:	06:50
14	A. I've not seen Bell + Howell --	06:50
15	Bell + Howell devices tested in rooms that have	06:50
16	furniture or carpeting. Though it still doesn't	06:50
17	change my opinion.	06:50
18	BY MR. KOPEL:	06:50
19	Q. Do you believe that if submitted for	06:50
20	publication in a peer-reviewed journal, the Chinese	06:50
21	studies conducted on the Bell + Howell repellers	06:50
22	would be potentially selected for publication?	06:50
23	MR. OSTOJIC: Objection. Asked and answered	06:50
24	like two to three hours ago.	06:50
25	Common, we got to move on to other	06:50

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1	things. We're just repeating the same questions.	06:50
2	But go ahead and answer it again.	06:50
3	BY THE WITNESS:	06:50
4	A. No, that wasn't the purpose of their	06:50
5	studies. Feuerstein said that. It did not want to	06:50
6	publish.	06:50
7	MR. KOPEL: All right. I have no further	06:50
8	questions.	06:50
9	MR. OSTOJIC: We're going to reserve	06:50
10	signature.	06:50
11	THE VIDEOGRAPHER: The time it now 6:53 p.m.	06:51
12	This is the end of Media No. 5. This concludes this	06:51
13	deposition.	
14	We're off the record.	06:51
15	MS. REPORTER: Are you ordering the	06:51
16	transcript at this time?	06:51
17	MR. KOPEL: Not at this time.	06:51
18	Do you know pricing? Can I look at	06:51
19	pricing? I'm going to have my office contact	06:51
20	Veritext in regards to ordering.	06:51
21	MS. REPORTER: Would you like a copy if it's	
22	ordered?	06:51
23	MR. OSTOJIC: I will not need one now; but	06:51
24	obviously if the plaintiff orders one, please contact	06:51
	me, I will probably get a copy.	06:51
25	(Whereupon, at 6:53 p.m. the deposition was concluded.)	